

### ABSTRACT OF THE DISCLOSURE

Apparatus and methods for fragrance sensory stimulation connected to a multimedia source that has at least one audiovisual signal connected to an audiovisual display, and also has  
5 fragrance information synchronized with the audiovisual signal is disclosed. In preferred embodiments, a fragrance generator processes the fragrance information into a fragrance signal and at least one fragrance control system accepts a fragrance signal as an input, and generates a control signal and a burst of compressed gas. In turn, a fragrance delivery system preferably comprising a plurality of fragrance chemicals in communication with the burst of compressed gas  
10 selectively volatilizes the fragrance chemicals so that a short burst of fragrance is sensed by the subject. Preferably, this short burst is followed by a purging burst that clears the fragrance so that another subsequent fragrance is easier to sense. The compressed gas may be generated by a source of compressed gas or a compressor. In certain embodiments, the fragrance delivery system comprises an indexing turret containing a plurality of ports, each port containing one of  
15 said plurality of fragrance chemicals. In other preferred embodiment, a multiport micro-valve or array of such valves contains an absorbent material impregnated with a fragrance in each port.